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10/068,119	02/06/2002	Feniosky Pena-Mora	MIT-086AUS	5759

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EXAMINER
STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
2121	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/06/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-6 and 8-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *2-4,6 and 8-23* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date 12/06/06

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 2-6,8-11,13,15-22 were examined.

Claim Objection

2.   Claim 5 is objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

4.   Claims 2-4, 6,8-23 are rejected under 35 U.S.C. 102(b) as being anticipated by

Pollalis et al., (US Patent 5,016,170; hereafter Pollalis). Pollalis teaches a management

task technique (abstract).

Claim 2. The method of claim 23, wherein the structuring selected activities (figure 7,

"task activities") comprises: providing at least one of the activity characteristics values

as an activity reliability value; and associating the activity reliability value with at least

one of the activities (figure 7, "task activities") within the plurality of activities(figure 7,

"task activities") and with a corresponding at least one activity pre-structured process

models.

Claim 3. The method of claim 23, wherein the structuring selected activities (figure 7,

"task activities")comprises: providing at least one of the activity characteristics values as

a production type value; and associating the production type value with at least one of

the activities(figure 7, "task activities") within the plurality of activities (figure 7, "task

activities")and with a corresponding at least one of the activity pre-structure process

models.

Claim 4. The method of claim 23, wherein the structuring the time precedence

relationships comprises: providing at least on of the activity relationship values

(examples of relationships between slabs and beams in figure 8) as a precedence

relationship value; and associating the time precedence relationship (figure 1, element

18, 22,24) value with at least one of the time precedence relationships (figure 8

examples of "slab" and "wall" and their relationships with each other relative to duration

of days) and with a corresponding at least one of the activity relationship pre-structured

models (e.g., "Matrix-Balanced Master Schedule" figure 26).

Claim 6. The method of claim 23, further comprising: associating a policy value

(applicants defines policy data or value as manpower availability; figure 6, 'labor

only")with at least one of the selected activities (figure 7, "task activities") and with a

respective at least one of the activity pre-structured process models.

Claim 8. The method of claim 23, wherein at least one of the time precedence relationships and a corresponding at least one of the activity relationship pre-structured models includes a reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46)extending prior to a start time of a downstream one of the plurality of activities(figure 7, "task activities") and coupled to an upstream (figure 11) one of the plurality of activities (figure 7, "task activities").

Claim 9. The method of claim 8, wherein the at least one of the time precedence relationships (figure 8, planned duration (days)) is indicative of a relationship between the end of the upstream (figure 11) activity (figure 3, elements 56-57) and the start of the reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46).

Claim 10. The method of claim 8, wherein the reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) is associated with a corresponding one of the activity relationship values (examples of relationships between slabs and beams in figure 8).

Claim 11. The method of claim 23, further comprising: associated a policy value (applicants defines policy data or value as manpower availability; figure 6, 'labor only") with at least one of the time precedence relationships and with a respective at least one of the activity relationship pre-structured models (e.g., "Matrix-Balanced Master Schedule" figure 26).

Claim 13. The method of claim 23, wherein further comprising: automatically updating (each row data is changed or update relative to each day or days, figure 8) a reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) extending prior to a start time of the second activity, wherein the updated reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) has at least one of an updated duration value, an updated upstream (figure 11) time precedence relationship value between the updated reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) and an upstream (figure 11) activity, or an updated downstream time precedence relationship between the updated reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46)and the second activity.

Claim 15. The method of claim 23, wherein the automatically updating (each row data is changed or update relative to each day or days, figure 8) the second activity relationship value (first activity is not clearly defined but Office relays examples from figure 7 e.g., "concrete") comprises: structuring the first activity relationship pre-structured model (e.g., fig 26, element 158)with a first reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46)having the first activity relationship value (first activity is not clearly defined but Office relays examples from figure 7 e.g., "concrete"), wherein the first reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) is associated with a start time of the first activity; structuring the second activity relationship pre-structured model (e.g., fig 26, element 152)with a second reliability buffer ("time buffers", or timing tasks, column 3, lines 40-46) having a second activity relationship

value (first activity is not clearly defined but Office relays examples from figure 7 e.g.,

"concrete"), wherein the second reliability buffer ("time buffers", or timing tasks, column

3, lines 40-46)is associated with a start time of the second activity; and automatically

updating (each row data is changed or update relative to each day or days, figure 8) the

second activity relationship value (first activity is not clearly defined but Office relays

examples from figure 7 e.g., "concrete") in response to the updating (each row data is

changed or update relative to each day or days, figure 8) the first activity relationship

value (first activity is not clearly defined but Office relays examples from figure 7 e.g.,

"concrete").

Claim 16. The method of claim 23, wherein the second activity has a similar activity

name (e.g., "concrete", "M & E", "Form Work", figure 7) (figure 22 with column 9, lines 4-

16 where the bars as similar in figure 22, the dry wall and ceiling grid bar

representations are similar) as the first activity (first activity is not clearly defined but

Office relays examples from figure 7 e.g., "concrete").

Claim 17. A dynamic planning apparatus (column 4, "project planner", lines 21-

29)comprising: a dynamic planning method (column 4, "project planner", lines 21-

29)(DPM) (column 4, "project planner", lines 21-29)) data processor that provides a

plurality of activities(figure 7, "task activities") having respective activity data (figure 7,

"task activities") that includes at least one of policy data (applicants define project

policies as "manpower availability" in response on page 13, 2nd paragraph; "manpower

or quality of work...required for the task, column 1, lines 55-65), activity characteristics data, or activity relationship data; and a DPM (column 4, "project planner", lines 21-29)processor coupled to the DPM (column 4, "project planner", lines 21-29)data processor to process the activity data (figure 7, "task activities"), wherein the DPM (column 4, "project planner", lines 21-29)processor is adapted to automatically update selected activity data (figure 7, "task activities") from among the activity data (figure 7, "task activities") in response to update of other selected activity data (figure 7, "task activities") from among the activity data (figure 7, "task activities").

Claim 18. The dynamic planning apparatus (column 4, "project planner", lines 21-29)of claim 17, wherein the DPM (column 4, "project planner", lines 21-29) processor also provides one or more DPM (column 4, "project planner", lines 21-29)performance profiles.

Claim 19. The dynamic planning apparatus (column 4, "project planner", lines 21-29)of claim 17, wherein the DPM (column 4, "project planner", lines 21-29)data processor includes: a DPM (column 4, "project planner", lines 21-29)policy data (applicants define project policies as "manpower availability" in response on page 13, 2nd paragraph; "manpower or quality of work...required for the task, column 1, lines 55-65) processor that provides the policy data (applicants define project policies as "manpower availability" in response on page 13, 2nd paragraph; "manpower or quality of work...required for the task, column 1, lines 55-65); and a DPM (column 4, "project

planner", lines 21-29)activity data (figure 7, "task activities") processor that provides the

activity characteristics data and the activity relationship data (figure 8, examples of

activities per row).

Claim 20. The dynamic planning apparatus (column 4, "project planner", lines 21-29)of

claim 19, wherein the DPM (column 4, "project planner", lines 21-29)activity data (figure

7, "task activities") processor includes: DPM (column 4, "project planner", lines 21-

29)activity characteristics graphical user interface (GUI) (most computer have gui

interfaces, column 7, lines 10-13) that provides the activity characteristics data (figure

7, "task activities"); and a DPM (column 4, "project planner", lines 21-29)activity

relationship GUI) (most computer have gui interfaces, column 7, lines 10-13) that

provides the activity relationship data (figure 7, "task activities") .

Claim 21. The dynamic planning apparatus (column 4, "project planner", lines 21-29)of

claim 19, wherein the DPM (column 4, "project planner", lines 21-29)activity data (figure

7, "task activities") processor includes a dependency structure matrix (GUI) (most

computer have gui interfaces, column 7, lines 10-13) for entry of at least one of the

activity characteristics data and or the activity relationship data (figure 7, "task

activities").

Claim 22. The dynamic planning apparatus (column 4, "project planner", lines 21-29)of

claim 17, further comprising: one or more conventional project planning models that

provide conventional project plan data (figure 9 and figure 6); and a data transfer

processor coupled to the one or more conventional project planning models ('various

activities by joining them corner to corner...bar chart" column 8, lines 60-66 with figure

20) and further coupled to the DPM (column 4, "project planner", lines 21-29) data

processor to receive the conventional project plan data(figure 9 and figure 6) from the

one or more conventional project planning models (figure 26) and to provide formatted

data to the DPM (column 4, "project planner", lines 21-29)data processor.

Claim 23. A computer-implemented method of dynamic project planning, comprising:

generating a project list having a plurality of activities, (figure 7, "task activities") each

activity having a respective activity name (e.g., "concrete", "M & E", "Form Work", figure

7); structuring selected activities(figure 7, "task activities") from among the plurality of

activities (figure 7, "task activities")with respective activity pre-structured process

models, the activity pre-structured process models having respective activity

characteristics values; generating time precedence relationships between the plurality

of activities (figure 7, "task activities"); structuring the time precedence relationships

with respective activity relationship pre-structured models, the activity relationship

pre-structured models having respective activity relationship values (examples of

relationships between slabs and beams in figure 8); selecting a first

activity having a first activity name (e.g., "concrete", "M & E", "Form Work", figure 7)

from among the plurality of activities, (figure 7, "task activities") wherein the first activity

(first activity is not clearly defined but Office relays examples from figure 7 e.g.,

"concrete")is associated with a first one of the activity pre-structured process models

having a first activity characteristics value, (first activity is not clearly defined but Office

relays examples from figure 7 e.g., "concrete")wherein the first activity is associated

with a first one of the activity relationship pre-structured models having a first activity

relationship value; updating (each row data is changed or update relative to each day

or days, figure 8) at least one of the first activity characteristics value or the first activity

relationship value (first activity is not clearly defined but Office relays examples from

figure 7 e.g., "concrete"); automatically identifying, in response to the updating (each

row data is changed or update relative to each day or days, figure 8), a second activity

having a second activity (second activity is not clearly defined but Office relays

examples from figure 7 e.g., "concrete") name (e.g., "concrete", "M & E", "Form Work",

figure 7) from among the plurality of activities, (figure 7, "task activities") wherein the

second activity (second activity is not clearly defined but Office relays examples from

figure 7 e.g., "concrete") is associated with a second activity (second activity is not

clearly defined but Office relays examples from figure 7 e.g., "concrete")pre-structured

process model having a second activity characteristics value, (second activity is not

clearly defined but Office relays examples from figure 7 e.g., "concrete") wherein the

second activity is associated with a second one of the activity relationship.

Section II: Response to Arguments

103(a)

5.   Applicants' arguments, see pages 9-16, filed 03/06/2007, with respect to the

rejection(s) of claim(s) 2-17,19,21 and 22 under 35 U.S.C. 103(a) have been fully

considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of

Pollalis.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicants' disclosure:

- US Patent 5,111,404 teaches a system for managing successive process to be performed on raw materials.

- US Patent 5,128,860 teaches improved method for allocating manufacturing or process resources.

- US Patent 5,173,869 teaches a method of simulating a sequential control program by composing simulation ladder program elements with timer elements.

- US Patent 5,303,170 teaches project/process simulation tool defines an activity; defines alternative resources required to commence the activity; determine availability of the alternative resources; and varies a duration of the activity based on the availability of the alternative resources.

- Sawimey-A., "Petri Net Based Simulation of Construction Schedules", teaches a process to depict construction project scheduling.

7.   Applicants' amendment necessitated the new grounds of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (7:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Anthony Knight 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

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